Application/Control No. Applicant(s)/Patent under Reexamination Index of Claims 10/768,439 HIGAKI ET AL. Examiner Art Unit Hashem Farrokh 2187

| 1 | Rejected | | (Through numeral) Cancelled | N | Non-Elected | Α | Appeal |
|---|----------|---|--------------------------------|---|--------------|---|----------|
| = | Allowed | ÷ | Restricted | | Interference | 0 | Objected |

| The color of the | Cla | aim | | | | Dat | e | | | | Clai | m | | | _ (| Date | | - |] | Cla | aim | | - | | D | ate | | | | |
|--|-----|----------|--------|---------------|---|------------------|--------|-----------------|-----------------|-----|-----------------|-----|---------------|---------|----------|----------|-------------------|-------------|----|------|-----|----------|--------------|-----------|---------------|---|--------|----------|--------------|--------|
| 1 V | | - | | | | | | | | | | _ | | | | | | | | | = | | | | | T | | | | |
| 1 V | lal | <u> </u> | g | | | | | | | | اع | اق | ł | | | | | | | la l | ij. | | | 1 | | - | | | 1 | |
| 1 V | ΙĒ | Ĕ | 🖺 | | | 1 | | | | | 這 | į, | | | | 1 | | | | i. | .j. | | | | ł | | | | İ | |
| S2 | | | | | | | | | _ _ | | | 1. | | _ | | | | | | | ١ | | | - | H | - | - 1 | | | |
| 3 0 1 1 53 1 1 103 1 1 1 1 1 1 1 1 1 | | 1 | V | | | | | | | Γ | | | | 1 | | | | | 7 | | 101 | П | | П | \neg | П | \neg | П | \neg | |
| 3 0 1 1 53 1 103 104 105 106 106 106 106 106 106 106 106 107 108 109 | | 2 | 0 | | | | | | | Γ | | 52 | $\neg \vdash$ | | | | \top | П | 7 | | 102 | \neg | | П | | П | \neg | П | \neg | |
| S | | 3 | 0 | | | | | | | | | 53 | | | | | | | 7 | | 103 | | | | \neg | Т | | | \neg | |
| 6 | | 4 | | | T | | | | | | | 54 | | | | | | | | | 104 | | | | | \Box | | \Box | \Box | |
| Fr | | 5 | | | | | | | | | | | | | | | | | | | 105 | | | | | \Box | | \Box | \Box | |
| S | | 6 | | | | | | | | | | 56 | | | | | | | | | 106 | | | | | | | | | |
| 9 0 10 0 0 110 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 111 0 0 | | | 1 | | | | | | | | | | | | | | | | | | | | | | | \Box | | | | |
| 10 | | 8 | | | | į | | | oxdot | | | | | | | | | | | | | | | | | \Box | | | | |
| 11 | | g, | 0 | | | | | | | | | | | | | | | | | | 109 | | | | | | | | | |
| 13 O | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 O | | | 0 | $oxed{oxed}$ | \prod | | | | | | | | $\Box \Gamma$ | | | \Box | | $\Box \Box$ | _] | | | | | | .] | \Box | | \Box | \Box | |
| 14 | | | 0 | \prod | | | | | | | | | | | | \Box | | | | | | | | | | | | | | |
| 15 V | | | | $\Box \Gamma$ | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Gamma}}}$ |] | | | | | | | | | | | | $\Box \Box$ | | | | \Box | \Box | | $oxed{J}$ | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | | \Box | \Box | |
| 16 V | | | | | | | | | | | | 64 | | | | | | |] | | | | | | $\cdot T$ | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | | \Box | $oxed{\Box}$ | |
| 16 | | 15 | | | \perp | | | | | | | | | | | | | |] | | 115 | | | | . [| \prod | | \Box | \Box | |
| 18 . 68 118 119 118 119 119 119 119 120 120 121 121 122 122 122 122 122 122 122 122 122 122 122 122 122 122 122 122 122 123 124 124 124 124 125 125 125 125 125 125 125 125 125 125 127 127 127 127 128 128 128 128 128 129 </td <td></td> <td></td> <td>V</td> <td>\Box</td> <td></td> <td>\Box</td> <td></td> <td></td> <td>$\Box \Box$</td> <td></td> <td></td> <td>116</td> <td>\Box</td> <td>$oxed{oxed}$</td> <td>\Box</td> <td>\perp</td> <td>\bot</td> <td>\Box</td> <td>\Box</td> <td>$oxed{\int}$</td> <td></td> | | | V | \Box | | | | | | | | | | | \Box | | | $\Box \Box$ | | | 116 | \Box | $oxed{oxed}$ | \Box | \perp | $ \bot $ | \Box | \Box | $oxed{\int}$ | |
| 19 | | | | | | | | | | | | | | | | | | |] | | 117 | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | | | 118 | | | | | | | | | |
| 21 22 121 72 122 123 123 123 123 124 124 124 124 124 124 125 126 126 126 126 126 127 127 127 127 127 127 127 128 128 128 128 128 128 128 129 129 129 129 130 130 130 130 130 130 130 131 131 131 131 131 131 131 131 131 131 132 132 133 | | 19 | | | T | | | | | Γ | | 69 | | | | | | | 7 | | 119 | | | 7 | | T | | \neg | | |
| 21 71 72 121 122 122 123 123 123 123 123 124 124 124 124 124 124 124 124 125 125 125 125 125 126 127 127 127 127 127 127 127 127 128 128 128 128 128 128 129 129 129 129 129 129 129 129 129 130 130 130 130 130 130 130 131 131 131 131 131 131 131 131 131 131 131 132 132 132 132 133 | | 20 | | | | | | | | | | 70 | | | | | | |] | | 120 | | | | | | | \neg | | |
| 23 123 123 124 124 124 124 125 125 125 125 126 126 126 126 126 126 127 127 127 127 128 128 129 129 129 129 129 130 130 130 130 130 130 131 131 131 131 132 132 132 132 133 133 133 133 133 133 133 133 133 133 133 133 133 133 133 134 134 134 134 134 134 134 134 134 134 134 134 134 134 134 135 135 135 136 136 136 136 136 136 137 137 137 137 137 137 138 138 139 139 140 141 141 141 141 141 | | 21 | | | | | | | | - [| | 71 | | | | | | | 1 | | 121 | | | | | \neg | | \neg | \top | |
| 23 123 123 124 124 125 125 125 126 125 126 126 126 126 126 126 127 127 128 128 128 129 129 129 129 130 130 131 131 131 131 131 131 132 132 132 133 133 133 133 133 133 133 133 133 133 133 133 133 133 133 134 135 135 135 135 136 137 137 137 137 137 137 137 138 138 138 139 140 141 141 141 141 141 141 141 141 142 142 142 143 144 144 144 144 14 | | 22 | | | | | | | \Box | Γ | | 72 | | T | | | T | | 7 | | 122 | | | \neg | | \neg | | Т | | |
| 24 124 125 126 125 126 126 126 126 126 126 127 127 127 127 127 128 128 128 129 129 129 129 129 130 130 130 130 130 130 131 131 131 131 131 132 132 132 132 133 133 133 133 133 134 134 134 134 134 134 134 134 134 134 135 135 135 135 135 135 135 136 137 137 137 137 137 137 137 138 138 138 138 138 138 139 139 140 141 141 142 142 143 144 144 144 144 144 144 144 145 145 145 145 146 147 148 | | 23 | П | | \top | | | | | Γ | | 73 | | | | | | | 1 | | 123 | | | | | \neg | | | | |
| 25 125 126 126 126 126 126 126 126 127 127 127 127 127 128 128 128 128 128 129 129 129 130 130 130 131 131 131 131 131 131 132 132 132 132 133 133 133 133 133 133 133 134 134 134 135 135 135 136 137 137 137 137 137 137 138 138 138 138 138 138 139 139 140 141 141 142 142 142 142 142 142 143 144 145 145 145 145 146 147 147 147 148 149 149 149 149 149 149 149 149 149 149 149 149 149 149 | | 24 | \Box | | \top | | | | 7-1 | | • | 74 | \neg | 1 | | | 1 | | 1 | | | T | | | | 丁 | | ヿ | | |
| 26 76 126 127 27 77 78 128 29 79 129 129 30 80 130 131 31 81 131 131 32 83 132 133 33 84 134 134 35 85 135 136 36 86 137 138 38 88 138 138 39 90 140 141 41 91 140 141 42 92 142 142 43 93 143 144 44 94 144 144 45 96 146 147 48 98 148 148 49 99 149 144 | | 25 | | | 7 | | | | | Γ | | 75 | | 7 | | | | П | 1 | | 125 | | | | | \neg | | \neg | \Box | |
| 27 127 128 128 128 128 129 129 129 129 129 130 130 130 130 130 131 131 131 131 133 13 | | 26 | | | 1 | | | | | Γ | | 76 | | 1 | | \neg | | | 7 | | 126 | | | \neg | \neg | Т | T | T | \neg | |
| 28 78 128 129 129 129 130 130 130 131 131 131 131 131 131 131 131 131 131 132 132 133 | | 27 | | | | 1 | | | | Γ | | 77 | | | | | | | 7 | | 127 | | | | | \neg | | \neg | | |
| 29 | | 28 | | | | | | | $\neg \neg$ | Γ | | 78 | | | | | | | 7 | | 128 | \Box | | | T | П | \neg | ヿ | T | |
| 31 81 32 131 33 132 33 133 34 134 35 85 36 136 37 87 38 137 38 88 39 89 40 90 41 91 42 92 43 94 44 94 44 94 45 96 46 96 48 98 49 99 147 148 48 99 | | 29 | П | | | | | | $\neg \neg$ | Г | | 79 | | \top | | | | | 7 | | 129 | \Box | | | | П | \neg | T | | |
| 31 81 32 131 33 132 33 133 34 134 35 85 36 136 37 87 38 137 38 88 39 89 40 90 41 91 42 92 43 94 44 94 44 94 45 96 46 96 48 98 49 99 147 148 48 99 | | 30 | | | | | | | | Г | | 80 | | | | | | | 7 | | 130 | | | | $\cdot \top$ | Т | \Box | \neg | | |
| 32 | | | | | | | | | | Γ | | 81 | | | П | | | | 7 | | | | | | - [| \neg | | | | \neg |
| 33 34 35 36 35 36 37 38 37 38 39 <td< td=""><td></td><td>32</td><td></td><td></td><td></td><td></td><td></td><td></td><td>\Box</td><td>Γ</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>132</td><td>\Box</td><td></td><td></td><td>$\overline{}$</td><td></td><td></td><td></td><td>\top</td><td>╗</td></td<> | | 32 | | | | | | | \Box | Γ | | | | | | | | | | | 132 | \Box | | | $\overline{}$ | | | | \top | ╗ |
| 34 | | 33 | | | J | | | | | Ī | | 83 | | | | | | | | | 133 | | | | | T | | | | |
| 35 36 37 38 37 38 39 38 39 <td< td=""><td></td><td>34</td><td></td><td></td><td>T</td><td></td><td>П</td><td></td><td></td><td>Γ</td><td></td><td>84</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>134</td><td></td><td></td><td></td><td></td><td>T</td><td></td><td>\Box</td><td>T</td><td></td></td<> | | 34 | | | T | | П | | | Γ | | 84 | | | | | | | | | 134 | | | | | T | | \Box | T | |
| 36 86 136 137 137 137 138 138 138 138 138 139 139 139 139 140 140 140 140 141 141 141 141 141 141 141 141 142 142 142 143 144 144 144 144 144 144 145 145 146 147 147 148 148 148 148 149 | | 35 | | $\Box \Gamma$ | \int | | \Box | | | | | | | | | | | | | | 135 | | | J | | T | \Box | T | \Box | |
| 37 87 137 <td></td> <td>36</td> <td></td> <td></td> <td></td> <td>\mathbb{L}^{-}</td> <td></td> <td></td> <td></td> <td>Γ</td> <td></td> <td>86</td> <td></td> <td>\perp</td> <td></td> <td></td> <td>$oldsymbol{\Box}$</td> <td></td> <td>]</td> <td></td> <td>136</td> <td></td> <td></td> <td></td> <td></td> <td>┚</td> <td></td> <td>丁</td> <td>\Box</td> <td></td> | | 36 | | | | \mathbb{L}^{-} | | | | Γ | | 86 | | \perp | | | $oldsymbol{\Box}$ | |] | | 136 | | | | | ┚ | | 丁 | \Box | |
| 38 88 138 39 90 139 40 90 140 41 91 141 42 92 142 43 93 143 44 94 144 45 95 145 46 96 146 47 97 147 48 98 148 49 99 149 | | 37 | | | T | | | | | | | | | Ι | | | | | | | 137 | | \Box | | | \Box | | | \Box | |
| 39 89 139 40 90 140 41 91 141 42 92 142 43 93 143 44 94 144 45 95 145 46 96 146 47 97 147 48 98 148 49 99 149 | | 38 | | | | | | | | | | 88 | | | | | | |] | | 138 | | | Ţ | | 丁 | | 丁 | | |
| 40 90 140 41 91 141 42 92 142 43 93 143 44 94 144 45 95 145 46 96 146 47 97 147 48 98 148 49 99 149 | | 39 | | $\Box \Gamma$ | | Τ | | | | | | 89 | | Ι | | | \mathbb{I}^- | | | | 139 | | | | \Box | 丁 | \Box | | | |
| 41 91 141 142 42 92 142 143 43 93 143 144 94 94 144 145 46 95 145 146 47 97 147 147 48 98 148 148 49 99 149 149 | | | | $\neg $ | 1 | | | | \top | | | | | T | | | 1 | | 1 | | 140 | \neg | \neg | \exists | \Box | \neg | \neg | \dashv | \top | |
| 42 92 142 43 93 143 44 94 144 95 145 46 96 146 47 97 147 48 98 148 49 99 149 | | 41 | П | $\neg \vdash$ | 1 | \top | П | | \top | | | 91 | $\neg \vdash$ | Т | | | | | 1 | | | | \neg | \neg | \top | 寸 | \neg | \neg | \top | |
| 43 93 44 94 45 95 46 96 47 97 48 98 49 99 | | 42 | | | 1 | 1 | | | | | | 92 | | 1 | | | | | 1 | | 142 | 7 | 7 | 7 | \neg | \exists | \neg | \neg | \top | |
| 44 94 45 95 46 96 47 97 48 98 49 99 | | | П | $\neg \neg$ | \top | 1 | П | | 7-1 | | | | \neg | \top | \Box | | | - - | 1 | | | | 1 | 7 | 7 | 7 | 寸 | 7 | \top | |
| 45 95 46 96 47 97 48 98 49 99 | | | П | $\neg \vdash$ | \top | \top | П | $\neg \uparrow$ | 77 | | | 94 | \neg | \top | П | \neg | | - - | 1 | | 144 | 7 | _ | 7 | _ | _ | 7 | 7 | _ | |
| 46 96 47 97 48 98 49 148 | | 45 | П | \neg | \top | | П | | \sqcap | | | | | | П | | | | | | 145 | \dashv | \dashv | \dashv | | 十 | 7 | \dashv | \dashv | ٦ |
| 47 97 147 48 98 148 49 99 149 | | 46 | П | | _ | | П | | \top | | $\neg \uparrow$ | 96 | $\neg \vdash$ | T | \Box | \neg | | | ٦ | | 146 | \neg | \dashv | 7 | \dashv | 十 | 7 | \dashv | \neg | |
| 48 98 49 148 149 149 | | | | \neg | \top | 1 | П | \vdash | \top | r | | | $\neg \vdash$ | \top | \Box | \neg | 1 | | 1 | | | \dashv | \dashv | 7 | \dashv | \dashv | 7 | 寸 | \top | |
| 49 99 149 149 | | | П | \neg | \top | 1 | П | | $\dashv \dashv$ | | | | _ | _ | | _ | \top | | 1 | | 148 | \dashv | | 7 | . | \dashv | 7 | 寸 | 十 | |
| | | | | _ | _ | \top | \Box | _ | 1-1 | r | | | \top | \top | \sqcap | $\neg +$ | 1 | | 1 | | | \neg | - | \dashv | \dashv | \dashv | 7 | \dashv | 十 | \neg |
| | | 50, | H | \neg | \top | \top | П | | 17 | 卜 | | 100 | | | \Box | | 1 | | 1 | | 150 | _ | + | 7 | \dashv | 十 | 7 | \dashv | 十 | \neg |